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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/800,976	03/15/2004	David McCutchen		1374

7590
DAVID McCUTCHEN
2444 SE TIBBETTS ST.
PORTLAND, OR 97202

03/23/2007

EXAMINER

AN, SHAWN S

ART UNIT	PAPER NUMBER
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2621

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/23/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/800,976

Applicant(s)

MCCUTCHEN, DAVID

Examiner

Shawn S. An

Art Unit

2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Objections

1. Claim 1 is objected to because of the following informalities: On claim 1, the recited last line "..., throughout ...," has a spelling error. Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:
The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
3. Claim 2 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. In order to overcome this rejection, Applicant needs to provide exactly where in the specification discusses/suggests method as described in claim 2.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2621

5. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Keast et al (5,721,585) in view of Applicant's admitted prior art.

Regarding claim 1, Keast et al discloses a method for recording a stereoscopic image of a wide field of view, up to a complete sphere, including the steps of:

i. rotating said line scan devices simultaneously about an axis of rotation, the axis of rotation being approximately perpendicular (orthogonal) to said plane and disposed equidistant to and between said line scan devices, the rotation being at the rate of at least 500 rpm (higher than 30 rev per second) (abs.; col. 4, lines 16-27 and 34-40; col. 5, lines 16-51);

ii. sampling the output of said line scan devices at least 1000 times (sampling rate of 30 per second multiply by 60 seconds equal 1800 times) each during the rotation, to produce scans from each sensor (col. 5, lines 30-61); and

iii. processing the scans so as to assemble a composite image having stereoscopic separation throughout the image (Fig. 3A, col. 4, lines 54-57).

Keast et al does not seem to specifically disclose aligning at least two line scan devices within the field of view such that their optical axes are in the same plane, separated, approximately parallel, and pointed in the same direction.

However, Applicant's admitted prior art (Background Section) teaches that Jehle's "360 degree IR surveillance with panoramic display " (U.S. Pat. No. 4,977,323) uses an infrared scanner also aligned radially to the axis of rotation and Federau's "Line-Scan Panoramic Camera" (U.S. Pat. No. 4,532,544) also describes a radial axis for TV camera for creating the image according to an optical axis radial to the axis of rotation (Applicant: see section [0008]).

Therefore, it would have been considered obvious to a person of ordinary skill in the relevant art employing a method for recording a stereoscopic image as taught by Keast et al to incorporate Applicant's prior art teaching as above so as to align Keast et al's at least two line scan devices within the field of view such that their optical axes are in the same plane, separated, approximately parallel, and pointed in the same direction for creating stable image(s) according to the optical axis radial to the axis of rotation, thereby increasing the quality of images.

6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Keast et al and Applicant's admitted prior art as applied to claim 1 above, and further in view of Leske (6,404,146 B1).

Regarding claim 3, Keast et al and Applicant's admitted prior art do not seem to particularly disclose adjusting the convergence of the stereoscopic image by digital delays of the scans.

However, Leske teaches convergence control device (Fig. 2. 24) controlling the subpixel in a particular scan line and phase control device (24) being directly connected to the convergence control device for correcting horizontal positioning by providing fine phase control, which is accomplished not with filter devices alone, but with additional delay and advance timing circuits in order to achieve better focus, alignment, and positioning (col. 4, lines 57-67).

Therefore, it would have been considered obvious to a person of ordinary skill in the relevant art employing a method for recording a stereoscopic image as taught by Keast et al to incorporate Leske's teaching as above so as to adjust the convergence of Keast et al's stereoscopic image by digital delays of the scans in order to achieve better focus, alignment, and positioning.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure.

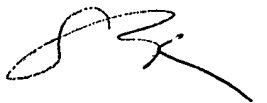
A) Kerbyson (5,790,183), High-Resolution Panoramic TV surveillance system with synoptic wide-angle field of view.

8. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to *Shawn S An* whose telephone number is 571-272-7324.

Art Unit: 2621

9. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

10. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



SHAWN AN
PRIMARY EXAMINER

3/17/07